

Collaborative Professional Learning Through Learning Action Cell and Its Effect on Teaching Effectiveness

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Abstract. Despite the widespread implementation of teacher professional development programs, empirical evidence examining the direct influence of school-based collaborative platforms on multifaceted teaching effectiveness remains limited within rural division contexts. To address this critical research gap, this study evaluated the extent of collaborative professional learning through Learning Action Cells (LAC) and its relationship to teaching effectiveness among school leaders and teachers in the Bohol Division during the School Year 2025-2026. Specifically, the investigation analyzed respondent profiles in terms of age, gender, civil status, highest educational attainment, years in service, performance rating, and relevant training sessions attended. Employing a quantitative descriptive-correlational research design, data were collected using a modified, validated questionnaire distributed to 55 respondents. Statistical analysis was conducted using frequency counts, percentage distributions, weighted means, standard deviations, chi-square tests of independence, and Pearson product-moment correlation coefficients. The findings indicated that collaborative professional learning through Learning Action Cells was highly evident across all dimensions, including collaborative lesson planning, sharing of instructional strategies, reflective teaching practices, peer coaching and mentoring, and collegial support. Furthermore, teaching effectiveness was consistently manifested in instructional preparation, classroom management, instruction delivery, assessment of learning, learner engagement, and differentiated instruction. Although respondent demographic profiles showed no statistically significant relationship with engagement in Learning Action Cells, a significant positive relationship was established between collaborative professional learning and teaching effectiveness. This highlights the practical significance of structured, peer-led learning initiatives in directly enhancing classroom pedagogical execution and instructional quality. The study concludes that institutionalizing continuous collegial collaboration elevates teaching performance and recommends implementing an Enhanced Learning Action Cell Implementation Framework to systematically support professional growth and instructional standards.

Keywords: Administration and supervision; Collaborative learning; Descriptive-correlational design; Professional development; Teaching effectiveness

Introduction

Education serves as a primary driver of national development and economic stability, with teacher quality standing out as the single most impactful school-based determinant of student achievement (OECD, 2021). While traditional, one-off workshops fail to yield lasting improvements in classroom practice, collaborative, job-embedded professional learning, characterized by shared inquiry, peer mentoring, and reflective dialogue, demonstrates far stronger effects on instructional effectiveness (Darling-Hammond et al., 2022; Hargreaves & O'Connor, 2021). In the Philippines, the Department of Education institutionalized school-based collaboration through the Learning Action Cell (LAC) mechanism under DepEd Order No. 35, s. 2016. Although designed to foster continuous professional growth, significant implementation gaps persist, with many schools reducing LAC sessions to routine administrative compliance rather than meaningful, reflective practice (Valdez, 2023).

Despite extensive international literature documenting the benefits of collaborative learning communities, existing Philippine research exhibits two major limitations that define the core research gap. First, previous local studies predominantly evaluate LACs through administrative completion rates or broad teacher performance metrics, failing to investigate how specific collaborative dynamics—such as peer coaching,

evidence-based reflection, and shared leadership—directly translate into classroom instructional quality (Bautista et al., 2021). Second, empirical evidence linking LAC engagement to specific dimensions of teaching effectiveness remains scarce in regional contexts, particularly within Region VII (Central Visayas). Consequently, it remains unresolved whether, and to what extent, the LAC model serves as an actual mechanism for instructional enhancement or merely a surface-level requirement.

The Division of Bohol in Region VII presents a critical focal point for addressing this gap. Schools in this division face unique, compounded instructional pressures, including diverse multi-grade and large-class environments, geography-driven resource disparities, and critical post-pandemic learning recovery needs. Examining LAC dynamics in Bohol provides essential, real-world insight into how localized collaborative frameworks perform in complex, non-urban educational ecosystems.

This study addresses these unresolved issues by investigating the influence of collaborative professional learning through the Learning Action Cell on teachers' teaching effectiveness in the Division of Bohol. Specifically, it aims to assess the level of teacher engagement in LAC sessions across key collaborative dimensions—namely shared instructional planning, reflective dialogue and feedback, peer coaching or observation, and action research or evidence-based inquiry. Simultaneously, the study measures teachers' instructional effectiveness across core domains, including instructional planning and preparation, classroom management, instructional delivery, and assessment strategies. By analyzing these variables, the investigation seeks to determine if a significant relationship exists between LAC collaborative dynamics and teaching effectiveness, while identifying which specific collaborative dimensions serve as significant predictors of higher instructional quality.

The scope of this study is focused on public elementary and secondary school teachers within the Division of Bohol during the current academic year. To maintain a clear analytical framework, the study is delimited geographically to selecting public schools within the Division of Bohol, excluding private institutions and other divisions in Region VII. Furthermore, teaching effectiveness is measured using teacher self-assessments paired with supervisor or principal evaluations based on standard competency measures, rather than direct student standardized test scores. Finally, external factors beyond school-based professional development such as individual teacher attributes, post-graduate education, or broader community influences are excluded from the study's scope.

Research Questions

This research assessed the level of PTA involvement and school performance at San Miguel Central Elementary School in the San Miguel District of the Division of Bohol during School Year 2025-2026, as a basis for the Collaborative Engagement Plan.

It specifically aimed to address the following questions:

1. As perceived by the respondent groups, what is the level of involvement of the PTA in terms of the following:
 - 1.1. objective;
 - 1.2. commitment;
 - 1.3. school affairs;
 - 1.4. facilities, equipment, and ground improvements, and
 - 1.5. pupils' development?
2. What is the level of school performance intensified through PTA involvement as regards:
 - 2.1. projects;
 - 2.2. awards and recognition; and
 - 2.3. safety and security?
3. Is there a significant relationship between the level of PTA involvement and school performance?
4. What are the issues and concerns associated with PTA involvement in school performance?
5. Based on the findings, what PTA collaborative engagement plan for school performance can be intensified?

Scope and Delimitation of the Study

This study evaluates the link between collaborative professional learning through Learning Action Cells (LAC) and teaching effectiveness during SY 2025–2026, aiming to develop an Enhanced Collaborative LAC Implementation Framework. The research covers demographic profiles (age, sex, civil status, highest degree, years in service, performance rating, and relevant trainings). It examines LAC engagement across five areas: lesson planning, strategy sharing, reflective teaching, peer coaching, and collegial dialogue. Teaching effectiveness is assessed across six instructional domains—planning, classroom management, delivery, assessment, learner engagement, and differentiated instruction—alongside organizational factors like leadership support, time, facilitation quality, and resources. The study is limited to San Miguel Central

Elementary School in the San Miguel District, Division of Bohol. Participants consist of 55 respondents (1 School Head, 8 Master Teachers, and 46 Classroom Teachers) selected via stratified random sampling. Methodologically, it uses a quantitative descriptive–correlational design with a validated questionnaire adapted from established teaching standards. Consequently, the results are specific to this school and require adaptation if applied elsewhere.

Literature Review

Contemporary educational research establishes that traditional, isolated teacher training yields minimal long-term instructional impact, pointing instead toward continuous, job-embedded learning as the primary driver of sustainable growth. Across both global and local contexts, literature converges on the premise that structured, school-based collaborative communities significantly enhance instructional quality. Globally, models such as Professional Learning Communities (PLCs) leverage shared accountability and collective inquiry to elevate teaching standards (DuFour & Fullan, 2021), while peer coaching and sustained professional dialogue cultivate instructional confidence and classroom innovation (Hargreaves & O'Connor, 2021). In the Philippine basic education setting, this global concept is operationalized through the Department of Education's Learning Action Cell (LAC), institutionalized under DepEd Order No. 35, s. 2016 and reaffirmed through the MATATAG Education Agenda (DepEd, 2023). The core practices embedded within LAC sessions—such as collaborative lesson design, structured reflective teaching, resource sharing, and peer coaching led by Master Teachers—directly mirror the foundational tenets of international PLC models.

This thematic alignment across literature is strongly anchored in a synthesis of foundational learning theories. Vygotsky's Social Constructivist Theory and Wenger-Trayner and Wenger-Trayner's (2021) Communities of Practice framework demonstrate that pedagogical knowledge is co-constructed through social interaction and shared inquiry (Hennessy et al., 2022). Complementing this, Knowles' Adult Learning Theory and Kolb's Experiential Learning Theory emphasize that adult educators thrive when professional development is self-directed, practical, and grounded in iterative cycles of action, reflection, and feedback (Merriam & Bierema, 2022; Morris, 2021). Furthermore, Schön's Reflective Practice framework (Liu, 2022) and Spillane and Diamond's Distributive Leadership Theory illustrate how sharing leadership responsibilities among administrators and Master Teachers builds collective responsibility for school-wide instructional quality (Harris & Jones, 2022). Together, these integrated perspectives confirm that active engagement in collaborative communities directly strengthens core teaching competencies, including objective alignment, clear instructional delivery, targeted assessment, effective classroom management, and differentiated instruction (Darling-Hammond et al., 2021, 2022).

However, while theoretical frameworks and national policy directives—such as the Philippine Professional Standards for Teachers (PPST), DepEd Order No. 35, BEDP 2030, and the Continuing Professional Development (CPD) Act—present a seamless alignment between collaborative structures and teaching effectiveness, empirical literature reveals critical implementation tensions. Policy directives often assume that institutionalization automatically translates into enhanced practice. However, research indicates that policy success is heavily moderated by organizational variables, including administrative support, dedicated scheduling, feedback systems, and school culture (Harris & Jones, 2022). Without these supportive structures, the collaborative ideal articulated by DuFour & Fullan (2021) risks degrading into administrative routine or superficial compliance.

These tensions highlight critical gaps in the existing literature. While current research extensively documents policy mandates and theoretical benefits, there remains a shortage of empirical studies examining how specific LAC practices differentially influence distinct teaching competencies within local basic education settings. Moreover, there is limited investigation into how organizational factors actively moderate this relationship during sustained policy implementation. The present study addresses these gaps by evaluating the direct relationship between structured LAC practices and specific dimensions of teaching effectiveness within the Philippine basic education context, while accounting for the organizational conditions that influence this impact.

Methodology

Research Design

This study employed a quantitative, descriptive, and correlational research design to determine the extent of collaborative professional learning through Learning Action Cell (LAC) and its effect on teaching effectiveness in secondary schools of the Bohol Division. The descriptive component described the respondents' profile and the level of collaborative professional learning through LAC and teaching

effectiveness. The correlational component examined the relationship between collaborative professional learning practices within LAC and teachers' teaching effectiveness. Data were collected using a structured survey questionnaire administered to teachers. The gathered data were analyzed using frequency counts, percentages, weighted means, and Pearson's r correlation coefficient. The findings of the study served as a basis for proposing an Enhanced Collaborative LAC Implementation Framework to improve teaching effectiveness in elementary schools.

Research Locale

The researchers conducted this study at San Miguel Central Elementary School in San Miguel, District of the Division of Bohol. San Miguel Central Elementary School, established in 1937, is among the most prominent public elementary schools in the municipality of San Miguel. Its existence attests to the dedication of local leaders, educators, and community members who envisioned a central learning institution to serve the educational needs of children in the district. The school's early years featured modest facilities and limited teaching staff, yet it produced academically competent and well-rounded learners. Over time, it expanded to accommodate the growing number of enrollees from the Poblacion and nearby barangays. Its central location within the municipality ensures accessibility for learners who walk or commute daily to attend classes. Today, San Miguel Central Elementary School serves as the district's main campus, with a steadily increasing student population in both regular and special education programs. The school offers SPED services and a comprehensive Kindergarten to Grade 6 curriculum, supported by dedicated teachers, school administrators, and non-teaching staff. It also houses functional learning facilities such as classrooms, a library, and a canteen, which contribute to a conducive learning environment. Aligned with the Department of Education's vision and mission, the school actively participates in national and regional initiatives, including the Academic Recovery and Accessible Learning Program in Reading (ARAL-Reading Program), as per DepEd Memorandum No. 064, s. 2025. This program aims to provide timely, responsive, and effective support to learners who fall below expected reading proficiency levels, enabling them to meet grade-level expectations set by the Department of Education (DepEd). San Miguel Central Elementary School upholds the principles of Education For All (EFA), striving to provide equitable, high-quality education while nurturing learners' multiple intelligences. With strong support from parents, community stakeholders, and the local government, the school remains committed to innovation, inclusivity, and the holistic development of every child.

Research Participants

The participants in the study were teachers and school administrators from San Miguel District, comprising a total of 55 respondents selected through stratified random sampling. This sampling technique involves dividing the population into smaller subgroups or strata based on common characteristics, such as income or educational level, and selecting participants from each stratum (Whitney, 2016). As shown in Table 1, the respondents consisted of one school head (1.85%), eight master teachers (14.81%), and 46 teachers (83.34%), for a total of 55 respondents (100.00%). The inclusion criteria required that participants (a) be teachers or school administrators, (b) be from San Miguel District, and (c) be willing to participate in and provide assistance to the study.

Research Instrument

The instrument used in this study was a modified standardized questionnaire adapted from professional learning community and teacher effectiveness survey frameworks of Hord (2021) and Darling-Hammond et al. (2022). The questionnaire was modified to suit the context of collaborative professional learning through the Learning Action Cell (LAC) and to assess teaching effectiveness in secondary schools. It consisted of three main parts. The first part of the questionnaire addressed the profile of the respondents, specifically teachers, in terms of age, gender, civil status, highest educational attainment, years of service, performance rating, and number of relevant trainings, seminars, and workshops attended related to LAC and professional development. The second part measured the extent of collaborative professional learning through LAC as perceived by the respondents. This section consisted of 25 statements distributed equally across five dimensions: collaborative lesson planning, sharing of instructional strategies, reflective teaching practices, peer coaching and mentoring, and professional dialogue and collegial support, with five items per dimension. The third part of the questionnaire focused on respondents' perceptions of teaching effectiveness. This section consisted of 30 statements covering instructional planning and preparation, classroom management, delivery of instruction, assessment of learning, learner engagement, and differentiation of instruction.

Data Gathering Procedure

A systematic and ethical procedure was used to gather the data for the study. The researchers initially sought permission from the Bohol Division School Division Superintendent via a formal request letter. Upon

approval, the researchers coordinated with school heads to administer the questionnaires. The researchers personally administered the survey to the identified teacher respondents. Clear instructions were provided, and respondents were given sufficient time, approximately ten to fifteen minutes, to accomplish the questionnaire. After completion, the questionnaires were retrieved, and the responses were collated for analysis. The gathered data were organized, tabulated, analyzed, and interpreted to generate the study findings, after which the final manuscript was edited and revised.

Results and Discussions

Collaborative Professional Learning Through LAC

This section presents the extent of collaborative professional learning through Learning Action Cell (LAC) as perceived by the respondents. Collaborative professional learning within LAC serves as a school-based professional development mechanism that encourages teachers and school leaders to work together in improving instructional practices and teaching effectiveness. Through structured collaboration, educators share knowledge, reflect on classroom experiences, and develop strategies that address instructional challenges and learner needs. In this study, collaborative professional learning through LAC is examined in terms of collaborative lesson planning, sharing of instructional strategies, reflective teaching practices, peer coaching and mentoring, and professional dialogue and collegial support. These components represent key collaborative practices that enable teachers to engage in continuous professional growth and collective problem-solving. According to Darling-Hammond et al. (2022), collaborative professional learning communities enhance instructional quality by allowing teachers to share expertise, analyze teaching practices, and apply new strategies in their classrooms.

Collaborative Lesson Planning

This section presents the extent of collaborative lesson planning among teachers and school leaders during Learning Action Cell (LAC) sessions. Collaborative lesson planning allows educators to work together in designing instructional objectives, learning activities, and assessment strategies that respond to learners' needs. Through joint planning, teachers can share expertise, align instructional practices, and improve the quality of lesson delivery. According to Darling-Hammond et al. (2022), collaborative planning strengthens instructional coherence and promotes more effective teaching practices.

Table 1. Collaborative Lesson Planning

Indicators	School Leaders		Teachers		Average		
	WM	SD	WM	SD	WM	SD	Interpretation
Teachers collaboratively plan lessons during LAC sessions.	3.64	0.86	3.74	0.45	3.69	0.65	Highly Evident
Instructional objectives are aligned through LAC planning.	3.64	0.87	3.83	0.39	3.73	0.63	Highly Evident
Teachers jointly design instructional activities.	3.70	0.84	3.83	0.49	3.76	0.66	Highly Evident
Lesson plans are improved through team feedback.	3.75	0.85	3.83	0.39	3.79	0.62	Highly Evident
Planning considers learner needs and data.	3.69	0.88	3.91	0.29	3.80	0.59	Highly Evident
Overall Mean	3.69	0.86	3.83	0.40	3.76	0.63	Highly Evident

Table 1 shows that collaborative lesson planning during Learning Action Cell (LAC) sessions is strongly established across participating schools, as evidenced by an overall mean score of 3.76 (SD = 0.63), described as Highly Evident. Among school leaders, the highest-rated indicator was "Lesson plans are improved through team feedback" (WM = 3.75, SD = 0.85). In contrast, relatively lower indicators included direct teacher co-planning (WM = 3.64) and the alignment of instructional objectives (WM = 3.64). Meanwhile, teachers gave their highest rating to learner-centered, data-driven planning (WM = 3.91, SD = 0.29), while rating actual active co-planning during LAC sessions slightly lower at 3.74 (SD = 0.45). Overall, while collaborative planning is consistently practiced within LAC sessions across both respondent groups, specific procedural indicators point to variation between planning intention and hands-on execution.

The high overall evaluation underscores that collaborative lesson planning serves as a central pillar of school-based professional development. Engaging in shared lesson design and reflective review builds instructional coherence and enables teachers to adapt their strategies to diverse learner needs (Darling-Hammond et al., 2022). However, the lower ratings assigned by school leaders to direct co-planning and

objective alignment highlight the necessity for more structured, deliberate administrative frameworks to guide joint planning sessions (Harris & Jones, 2022). Concurrently, the gap between teachers' high valuation of data-driven planning and their slightly lower score for real-time co-planning during sessions suggests that LAC meetings require deeper, hands-on collaborative engagement rather than superficial review (Voogt et al., 2022). Continuing to refine these collaborative planning structures will ensure that LAC sessions move beyond discussion and directly elevate classroom teaching effectiveness.

Sharing of Instructional Strategies

This section presents the extent to which teachers share instructional strategies during LAC sessions. Sharing teaching strategies enables educators to exchange effective classroom practices, innovative methods, and instructional resources that can improve learning outcomes. Through professional collaboration, teachers gain new insights and approaches that may enhance their teaching effectiveness. Research shows that exchanging instructional strategies within professional learning communities promotes continuous instructional improvement (Harris & Jones, 2022).

Table 2. Sharing of Instructional Strategies

Indicators	School Leaders		Teachers		Average		Interpretation
	WM	SD	WM	SD	WM	SD	
Teachers share effective teaching strategies in LAC	3.80	0.85	3.91	0.29	3.86	0.57	Highly Evident
Best classroom practices are discussed collaboratively	3.80	0.87	3.96	0.21	3.88	0.54	Highly Evident
Teachers exchange instructional materials and resources.	3.59	0.86	3.74	0.45	3.66	0.66	Highly Evident
Innovative teaching approaches are introduced in LAC	3.59	0.87	3.78	0.42	3.69	0.65	Highly Evident
Teachers learn new strategies from colleagues	3.59	0.88	3.83	0.39	3.71	0.63	Highly Evident
Overall Mean	3.67	0.87	3.84	0.35	3.76	0.61	Highly Evident

Table 2 presents the extent of instructional strategy sharing during Learning Action Cell (LAC) sessions across participating schools, yielding an overall mean score of 3.76 (SD = 0.61), interpreted as Highly Evident. School leaders rated "Teachers share effective teaching strategies in LAC" and "Best classroom practices are discussed collaboratively" highest, both reaching a weighted mean of 3.80. Their lowest-rated indicators, though still falling within the Highly Evident range, were the exchange of materials, the introduction of innovative approaches, and learning new strategies from colleagues, each scoring a weighted mean of 3.59. Among teachers, "Best classroom practices are discussed collaboratively" emerged as the highest indicator (WM = 3.96, SD = SD = 0.21), whereas "Teachers exchange instructional materials and resources" received the lowest rating (WM = 3.74, SD = 0.45). Overall, while discussion-based strategy sharing is consistently evident across both groups, indicators related to the concrete exchange of physical materials and innovative practices scored comparatively lower.

These findings confirm that LAC sessions function as a collaborative space for exchanging pedagogical methods and professional knowledge to elevate instructional quality (Darling-Hammond et al., 2022). The high ratings assigned to collaborative discussions demonstrate that teachers actively engage in reflective dialogue regarding classroom practices. However, the lower scores observed for resource exchange and material sharing highlight a critical gap between verbal discussion and tangible resource co-creation (Harris & Jones, 2022). As professional learning community frameworks suggest, moving beyond discussion toward the active, direct sharing of instructional materials and innovative tools is essential for deepening teacher collaboration and driving sustained classroom improvements (Voogt et al., 2022). Strengthening mechanisms for direct resource sharing within LAC sessions will ultimately translate collaborative dialogue into enhanced teaching effectiveness and improved learner outcomes.

Reflective Teaching Practices

This section presents the extent of reflective teaching practices among teachers during LAC activities. Reflective practice encourages teachers to evaluate their teaching experiences, identify strengths and challenges, and develop strategies for improvement. Through reflection and discussion with colleagues, teachers gain a deeper understanding of their instructional approaches and learner responses. Reflective professional dialogue has been identified as a key component in improving teaching effectiveness and instructional quality (Voogt et al., 2022).

Table 3. Reflective Teaching Practices

Indicators	School Leaders		Teachers		Average		Interpretation
	WM	SD	WM	SD	WM	SD	
Teachers reflect on their teaching during LAC sessions.	3.80	0.85	3.91	0.29	3.86	0.57	Highly Evident
Classroom challenges are analyzed collaboratively.	3.80	0.84	3.87	0.34	3.84	0.59	Highly Evident
Teachers evaluate lesson effectiveness together.	3.70	0.87	3.87	0.34	3.78	0.61	Highly Evident
Teaching experiences are shared for improvement.	3.80	0.84	3.87	0.34	3.84	0.59	Highly Evident
Reflection leads to improved instructional practices.	3.80	0.84	3.87	0.34	3.84	0.59	Highly Evident
Overall Mean	3.78	0.85	3.88	0.33	3.83	0.59	Highly Evident

Table 3 presents the extent of reflective teaching practices during Learning Action Cell (LAC) sessions, yielding an overall mean score of 3.83 ($SD = 0.59$) interpreted as Highly Evident. School leaders rated four key indicators highest, each achieving a weighted mean of 3.80: teachers reflecting on teaching, collaborative analysis of classroom challenges, sharing experiences for improvement, and reflection leading to improved practices. Their lowest-rated indicator, though still falling within the Highly Evident range, was "Teachers evaluate lesson effectiveness together" ($WM = 3.70, SD = 0.8$). For teachers, "Teachers reflect on their teaching during LAC sessions" emerged as the highest individual indicator ($WM = 3.91, SD = 0.29$) while all other evaluated indicators tied at a weighted mean of 3.87. Overall, the data illustrate a strong, pervasive culture of reflective dialogue and collaborative problem-solving across both leadership and teaching ranks.

These findings confirm that LAC sessions serve as a collaborative mechanism where educators systematically evaluate instructional strategies, analyze classroom challenges, and engage in reflective dialogue to foster professional growth (Darling-Hammond et al., 2020). The high ratings across reflective indicators indicate that teachers use school-based learning communities to adapt and refine their classroom instruction continuously. However, the lower score assigned by school leaders to joint lesson evaluation underscores a key opportunity to move beyond general reflection toward structured, systematic peer evaluation of lesson effectiveness during meetings (Harris & Jones, 2022). As literature on middle leadership suggests, establishing clear routines for joint evidence-based evaluation allows school-based learning communities to translate reflective dialogue directly into measurable improvements in teaching effectiveness and student learning outcomes.

Peer Coaching and Mentoring

This section presents the extent of peer coaching and mentoring practices within LAC sessions. Peer coaching allows teachers to observe one another's teaching practices, share feedback, and support professional growth. Mentoring relationships also enable experienced educators to guide colleagues in improving instructional methods and classroom management. Studies suggest that peer coaching strengthens teacher competence and promotes collaborative professional learning in schools (Darling-Hammond et al., 2022).

Table 4. Peer Coaching and Mentoring

Indicators	School Leaders		Teachers		Average		Interpretation
	WM	SD	WM	SD	WM	SD	
Teachers observe and support one another's teaching.	3.80	0.83	3.83	0.39	3.81	0.61	Highly Evident
Mentoring occurs among teachers during LAC.	3.80	0.83	3.83	0.39	3.81	0.61	Highly Evident
Constructive feedback is provided among peers.	3.69	0.88	3.91	0.29	3.80	0.59	Highly Evident
Master teachers coach colleagues through LAC.	3.69	0.88	3.91	0.29	3.80	0.59	Highly Evident
Teachers assist peers in improving instruction.	3.70	0.87	3.87	0.34	3.78	0.61	Highly Evident
Overall Mean	3.74	0.86	3.87	0.34	3.80	0.60	Highly Evident

Table 4 presents the extent of peer coaching and mentoring during Learning Action Cell (LAC) sessions across participating schools, yielding an overall mean score of 3.80 ($SD = 0.60$), interpreted as Highly Evident. School leaders rated "Teachers observe and support one another's teaching" and "Mentoring occurs among teachers during LAC" highest, both achieving a weighted mean of 3.80. Their lowest-rated indicators,

though still within the Highly Evident range, were peer constructive feedback and Master Teacher coaching, both scoring a weighted mean of 3.69. Conversely, teachers assigned their highest ratings to peer constructive feedback and Master Teacher coaching (both WM = 3.91, SD = 0.29), while scoring peer observation and general mentoring slightly lower at a weighted mean of 3.83 (SD = 0.39). Overall, the data illustrate a strong baseline of collaborative guidance, with subtle contrast between leadership perspectives and teacher experiences regarding feedback loops and peer observation.

These findings confirm that LAC sessions foster an active school culture of mutual guidance, professional feedback, and horizontal support that elevates instructional competence (Darling-Hammond et al., 2020). The high ratings across coaching and mentoring indicators demonstrate that peer-led learning structures successfully encourage teachers to share pedagogical responsibility. However, the lower ratings assigned by school leaders to structured constructive feedback and Master Teacher coaching highlight an opportunity to formalize and standardize peer feedback mechanisms within LACs (Harris & Jones, 2022). As professional learning research emphasizes, embedding structured peer observation protocols and systematic coaching frameworks helps transform informal collegial interactions into targeted, evidence-based instructional improvements.

Professional Dialogue and Collegial Support

This section presents the extent of professional dialogue and collegial support among teachers and school leaders during LAC sessions.

Table 5. Professional Dialogue and Collegial Support

Indicators	School Leaders		Teachers		Average		Interpretation
	WM	SD	WM	SD	WM	SD	
Teachers engage in professional discussions in LAC.	3.74	0.87	3.94	0.21	3.84	0.47	Highly Evident
Instructional issues are discussed openly.	3.69	0.00	3.91	0.29	3.80	0.14	Highly Evident
Teachers support each other in solving problems.	3.80	0.87	3.96	0.21	3.88	0.54	Highly Evident
Collegial relationships are strengthened through LAC.	3.69	0.88	3.91	0.29	3.80	0.59	Highly Evident
LAC promotes teamwork among teachers.	3.69	0.90	3.96	0.21	3.82	0.55	Highly Evident
Overall Mean	3.74	0.70	3.94	0.24	3.84	0.47	Highly Evident

Table 5 shows that professional dialogue and collegial support during Learning Action Cell (LAC) sessions are strongly embedded across participating schools, as indicated by an overall mean of 3.84 (SD = 0.47), interpreted as Highly Evident. Among school leaders, active professional discussions and mutual problem-solving were rated highest, both reaching a weighted mean of 3.80. Their lowest-rated indicators, though still falling within the Highly Evident range, included open discussion of instructional issues, strengthening collegial relationships, and promoting teamwork, each scoring a weighted mean of 3.69. Among teachers, active engagement in professional discussions, collaborative problem-solving, and teamwork promotion tied as the highest indicators (each WM = 3.96, SD = 0.21), while open discussion of instructional concerns and strengthening collegial relationships were rated slightly lower at a weighted mean of 3.91 (SD = 0.29). Overall, the findings highlight a thriving culture of professional communication and teamwork within LAC sessions, alongside subtle variations regarding open dialogue surrounding sensitive instructional issues.

These findings confirm that LAC sessions serve as an indispensable venue for knowledge sharing, reflective dialogue, and collective problem-solving. Professional dialogue provides structured opportunities for educators to address complex instructional challenges, share pedagogical insights, and collaboratively evaluate classroom practices. Through continuous collegial support, teachers cultivate relational trust and solidify professional relationships that contribute to a positive, collaborative learning environment. As Hargreaves and O'Connor (2018, 2021) emphasize, open professional dialogue and mutual collegial support are fundamental to moving past superficial compliance and sustaining deep, impactful professional learning communities. Deepening open dialogue around challenging or sensitive classroom issues will further bolster mutual trust, enhance teacher efficacy, and drive continuous schoolwide instructional growth.

Summary of Results

Table 6 presents a summary of results on the extent of collaborative professional learning through the Learning Action Cell (LAC), as perceived by school leaders and teachers.

Table 6. Summary of Results

Indicators	School Leaders		Teachers		Average		
	WM	SD	WM	SD	WM	SD	I
collaborative lesson planning	3.69	0.86	3.83	0.40	3.76	0.63	Highly Evident
sharing of instructional strategies	3.67	0.87	3.84	0.35	3.76	0.61	Highly Evident
reflective teaching practices	3.78	0.85	3.88	0.33	3.83	0.59	Highly Evident
peer coaching and mentoring	3.74	0.86	3.86	0.34	3.80	0.60	Highly Evident
professional dialogue and collegial support	3.74	0.70	3.94	0.24	3.84	0.47	Highly Evident
Overall Mean	3.72	0.83	3.87	0.33	3.83	0.58	Highly Evident

The summary evaluation shows that collaborative professional learning practices across all domains are strongly established, as evidenced by an overall mean of 3.83 ($SD = 0.58$) interpreted as Highly Evident. Among the five measured domains, professional dialogue and collegial support achieved the highest overall rating ($WM = 3.84$, $SD = 0.47$). Conversely, collaborative lesson planning and sharing instructional strategies tied for the lowest domain ratings ($WM = 3.76$), though both remained well within the Highly Evident range. Comparing perceptions between respondent groups, teachers consistently rated collaborative learning practices higher than school leaders across all domains ($WM = 3.86$ vs. $WM = 3.74$). Overall, the summary data demonstrates strong positive engagement across all collaborative domains, with teachers expressing particularly high valuation of these practices alongside slight variations in domain-specific execution. These findings confirm that Learning Action Cell (LAC) sessions serve as an effective mechanism for driving key professional activities—such as shared lesson design, reflective dialogue, peer mentoring, and collegial discussions—that collectively enhance teaching competence and instructional quality (Darling-Hammond et al., 2022). The prominence of professional dialogue and collegial support underscores a mature school culture rooted in open communication, mutual trust, and shared problem-solving (Hargreaves & O'Connor, 2021). However, the relatively lower scores observed for collaborative lesson planning and strategy sharing indicate a key developmental opportunity to move beyond general dialogue toward more structured co-planning frameworks and expanded resource exchange during meetings. Refining these co-planning structures will ensure that teachers' high valuation of LAC collaboration translates into tangible, schoolwide instructional enhancements.

Level of Teaching Effectiveness

This section presents teachers' perceived level of teaching effectiveness. Teaching effectiveness is an important indicator of instructional quality and reflects how teachers plan, manage, deliver, and evaluate instruction to support learner achievement. In this study, teaching effectiveness is examined in terms of instructional planning and preparation, classroom management, instruction delivery, assessment of learning, learner engagement, and differentiation of instruction. These domains represent essential teaching competencies that contribute to effective classroom instruction and improved learning outcomes. According to Darling-Hammond et al. (2022), effective teachers demonstrate strong instructional planning, manage learning environments effectively, deliver engaging lessons, and use assessment and differentiated strategies to address diverse learner needs. The analysis of these domains provides insight into the overall effectiveness of teachers' instructional practices in the participating schools.

Instructional Planning and Preparation

This section presents the level of teaching effectiveness in terms of instructional planning and preparation.

Table 7. Instructional Planning and Preparation

Indicators	School Leaders		Teachers		Average		Interpretation
	WM	SD	WM	SD	WM	SD	
Teachers prepare organized and clear lesson plans.	0.80	0.84	0.87	0.34	0.84	0.59	Always
Objectives are aligned with curriculum standards.	0.80	0.00	0.87	0.34	0.84	0.17	Always
Instructional materials are prepared in advance.	0.59	0.88	0.83	0.39	0.71	0.63	Always
Lessons are structured logically.	0.69	0.88	0.91	0.29	0.80	0.59	Always
Planning considers learner diversity.	0.69	0.88	0.91	0.29	0.80	0.59	Always
Overall Mean	3.57	3.48	4.39	1.65	3.99	2.58	Always

The findings show that instructional planning and preparation practices are consistently demonstrated across participating schools, as evidenced by an overall mean of 3.99 ($SD = 2.58$), interpreted as Always. School leaders rated "Teachers prepare organized and clear lesson plans" and "Objectives are aligned with curriculum standards" highest, both reaching a weighted mean of 3.80. Conversely, their lowest-rated indicator was "Instructional materials are prepared in advance" ($WM = 3.59$), though still interpreted as Always. Teacher respondents rated "Lessons are structured logically" and "Planning considers learner diversity" highest ($WM = 0.91$, $SD = 0.29$). Paralleling the leadership team's evaluation, teachers rated the preparation of instructional materials lowest ($WM = 0.83$, $SD = 0.39$), though likewise interpreted as Always. Overall, both groups confirm that teachers maintain structured, curriculum-aligned, and learner-centered planning, with proactive material preparation serving as the primary area for procedural refinement.

These findings confirm that effective instructional planning serves as a cornerstone of high-quality classroom instruction. Systematic planning ensures that learning objectives, classroom activities, and assessment strategies are tightly aligned with national curriculum standards and diverse learner needs. Teachers who consistently prepare well-organized, logically structured lesson plans are better equipped to deliver coherent, purposeful, and inclusive learning experiences for their students. As Darling-Hammond et al. (2020, 2022) emphasize, deliberate instructional planning is essential for fostering effective teaching practices and directly elevating student learning outcomes. However, the shared lower score regarding advanced material preparation underscores the need to support teachers with better resource access and time management strategies to ensure that timely, high-quality teaching materials fully support instructional delivery.

Classroom Management

This section presents the table on the level of teaching effectiveness in terms of classroom management.

Table 8. Classroom Management

Indicators	School Leaders		Teachers		Average		Interpretation
	WM	SD	WM	SD	WM	SD	
Teachers maintain an orderly classroom.	3.70	0.86	3.83	0.39	3.76	0.62	Always
Classroom rules are consistently implemented.	3.80	0.00	3.87	0.34	3.84	0.17	Always
Learner behavior is managed effectively.	3.59	0.86	3.70	0.47	3.64	0.67	Always
Time is used efficiently during lessons.	3.69	0.88	3.91	0.29	3.80	0.59	Always
Positive learning environment is established	3.70	0.87	3.87	0.34	3.78	0.61	Always
Overall Mean	3.69	0.69	3.83	0.37	3.76	0.53	Always

Table 8 presents the classroom management practices across participating schools, showing that these practices are consistently demonstrated as reflected by an overall mean of 3.76 ($SD = 0.53$), interpreted as Always. Among school leaders, the highest-rated indicator was "Classroom rules are consistently implemented" ($WM = 3.80$), highlighting a strong focus on rule enforcement and routine discipline. Conversely, their lowest-rated indicator was "Learner behavior is managed effectively" ($WM = 3.59$), though still interpreted as Always. Teacher respondents rated "Time is used efficiently during lessons" highest ($WM = 3.91$, $SD = 0.29$), demonstrating competence in structuring instructional time and smooth transitions. Mirroring the school leaders' evaluation, teachers rated the effective management of learner behavior lowest ($WM = 3.70$, $SD = 0.47$), likewise interpreted as Always. Overall, both groups confirm a solid foundation of

structured, time-efficient classroom management, with targeted behavioral management serving as the primary area for further development.

These findings confirm that maintaining organized, safe, and supportive learning environments is essential for promoting active student engagement and positive behavior. Classroom management encompasses a teacher's ability to maximize instructional time, minimize behavioral disruptions, and establish a productive classroom atmosphere. Teachers consistently enforce clear rules and optimize instructional time create an environment where meaningful learning can thrive. As Hattie (2021) emphasizes, strong classroom management practices directly enhance student learning outcomes and serve as a cornerstone of overall teaching effectiveness. However, the shared lower score regarding learner behavior management highlights the need for continued professional development in positive discipline strategies and differentiated behavioral interventions to support diverse student needs.

Delivery of Instruction

This section presents the level of teaching effectiveness in terms of instruction delivery

Table 9. Delivery of Instruction

Indicators	School Leaders		Teachers		Average		Interpretation
	WM	SD	WM	SD	WM	SD	
Teachers explain lessons clearly.	3.80	0.85	3.91	0.29	3.86	0.57	Always
Strategies facilitate understanding.	3.69	0.00	3.91	0.29	3.80	0.14	Always
Examples and illustrations are used effectively.	3.80	0.85	3.91	0.29	3.86	0.57	Always
Teaching methods suit lesson objectives	3.70	0.87	3.87	0.34	3.78	0.61	Always
Instruction promotes active learning.	3.80	0.84	3.87	0.34	3.84	0.59	Always
Overall Mean	3.76	0.68	3.90	0.31	3.83	0.50	Always

The table above shows that instructional delivery practices are consistently demonstrated across participating schools, as reflected by an overall mean of 3.83 ($SD = 0.50$) interpreted as **Always**. School leaders rated three key indicators highest, each achieving a weighted mean of 3.80: clear lesson explanations, effective use of examples and illustrations, and instruction that promotes active learning. Their lowest-rated indicator—though still interpreted as **Always**—was "Strategies facilitate understanding" ($WM = 3.69$). For teacher respondents, clear explanations, effective strategies to facilitate understanding, and the use of examples tied as the highest indicators ($WM = 3.91$, $SD = 0.29$). Meanwhile, teachers rated aligning teaching methods with lesson objectives and promoting active learning slightly lower, both achieving a weighted mean of 3.87 ($SD = 0.3$), interpreted as **Always**. Overall, these findings highlight a strong standard of classroom delivery across participating schools, with further diversification of teaching methods serving as a key area for continued growth.

These findings confirm that effective instructional delivery plays a pivotal role in ensuring lesson content is presented clearly and structured to promote meaningful learning. Instructional delivery encompasses a teacher's ability to explain concepts, apply contextually appropriate teaching strategies, and facilitate interactive classroom experiences. Teachers who utilize clear explanations, real-world examples, and engaging active learning strategies ensure that students thoroughly comprehend concepts and participate meaningfully (Darling-Hammond et al., 2020). As Voogt et al. (2022) emphasize, effective educators continuously incorporate varied and responsive teaching strategies to cater to diverse learner needs and elevate classroom engagement. Consequently, refining instructional methods and expanding the range of delivery strategies within schools will further maximize student engagement, active participation, and overall academic achievement.

Assessment of Learning

This section presents the level of teaching effectiveness in terms of assessment of learning.

Table 10. Assessment of Learning

Indicators	School Leaders		Teachers		Average		Interpretation
	WM	SD	WM	SD	WM	SD	
Teachers use varied assessment methods.	3.80	0.84	3.87	0.34	3.84	0.59	Always
Assessment aligns with objectives	3.69	0.00	3.96	0.21	3.82	0.10	Always
Feedback is provided to learners	3.70	0.86	3.83	0.39	3.76	0.62	Always
Assessment results guide instruction.	3.69	0.88	3.91	0.29	3.80	0.59	Always
Progress is monitored regularly	3.70	0.86	3.83	0.39	3.76	0.62	Always
Overall Mean	3.72	0.69	3.88	0.32	3.80	0.51	Always

Table 10 shows that learning practices are consistently demonstrated across participating schools, as evidenced by an overall mean of 3.80 (SD = 0.51, *Always*). This confirms that teachers regularly deploy assessment strategies to evaluate comprehension, track progress, and refine instructional decisions (Black & Wiliam, 2021). School leaders rated "Teachers use varied assessment methods" highest (WM = 3.80, *Always*), highlighting administrative recognition of diverse evaluation approaches. Conversely, their lowest-rated indicators were "Assessment aligns with objectives" and "Assessment results guide instruction" (both WM = 3.69, *Always*), pointing to an opportunity to tighten the connection between assessment design and daily learning goals. Teacher respondents rated alignment between assessment and lesson objectives highest (WM = 3.96, SD = 0.21, *Always*), reflecting a strong teacher emphasis on measuring target competencies. Meanwhile, teachers rated providing feedback and regular progress monitoring slightly lower (both WM = 3.83, SD = 0.39, *Always*), suggesting room to optimize formative feedback loops.

These findings confirm that effective instructional delivery plays a pivotal role in ensuring lesson content is presented clearly and structured to promote meaningful learning. Instructional delivery encompasses a teacher's ability to explain concepts, apply contextually appropriate teaching strategies, and facilitate interactive classroom experiences. Teachers who utilize clear explanations, real-world examples, and engaging active learning strategies ensure that students thoroughly comprehend concepts and participate meaningfully (Darling-Hammond et al., 2020). As Voogt et al. (2022) emphasize, effective educators continuously incorporate varied and responsive teaching strategies to cater to diverse learner needs and elevate classroom engagement. Consequently, refining instructional methods and expanding the range of delivery strategies within schools will further maximize student engagement, active participation, and overall academic achievement.

Learner Engagement

This section presents the level of teaching effectiveness in terms of learner engagement.

Table 11. Learner Engagement

Indicators	School Leaders		Teachers		Average		Interpretation
	WM	SD	WM	SD	WM	SD	
Learners actively participate in lessons.	3.59	0.87	3.78	0.42	3.69	0.65	Always
Activities encourage interaction.	3.70	0.00	3.83	0.39	3.76	0.19	Always
Questions stimulate thinking.	3.59	0.87	3.78	0.42	3.69	0.65	Always
Learners show interest in tasks.	3.59	0.87	3.78	0.42	3.69	0.65	Always
Participation is encouraged.	3.80	0.84	3.87	0.34	3.84	0.59	Always
Overall Mean	3.65	0.69	3.81	0.40	3.73	0.54	Always

Table 11 shows that learner engagement practices are consistently demonstrated across participating schools, as shown by an overall mean of 3.73 (SD = 0.54, *Always*). This confirms that teachers regularly motivate students to interact with learning tasks, participate in discussions, and maintain interest in classroom activities (Fredricks et al., 2022). Both respondent groups identified "Participation is encouraged" as the highest-rated indicator, with school leaders giving it a weighted mean of 3.80 (*Always*) and teachers rating it at 3.87 (SD = 0.34, *Always*). This shared perception highlights a consistent effort to cultivate an inclusive, interactive atmosphere where students feel empowered to contribute.

Interestingly, both groups also aligned on the three lowest-rated indicators: "Learners actively participate in lessons," "Questions stimulate thinking," and "Learners show interest in tasks." School leaders rated each of these at 3.59 (*Always*), while teachers scored them at 3.78 (SD = 0.42, *Always*).

These findings confirm that teachers regularly motivate students to interact with learning tasks, participate in discussions, and maintain sustained interest in classroom activities. Learner engagement encompasses behavioral, emotional, and cognitive dimensions that collectively determine how deeply students connect with classroom instruction. Teachers who actively encourage student participation create a supportive space that fosters confidence and involvement. As Fredricks et al. (2019, 2022) highlight, fostering active learner engagement is crucial for increasing student motivation, deepening conceptual understanding, and sustaining overall academic effort. However, the lower scores observed for student-driven participation, curiosity, and thought-provoking questioning emphasize a valuable opportunity to incorporate higher-order questioning techniques and varied active-learning strategies to spark critical thinking, deeper inquiry, and genuine enthusiasm among learners.

Differentiation of Instruction

This section presents the level of teaching effectiveness in terms of instructional differentiation.

Table 12. Differentiation of Instruction

Indicators	School Leaders		Teachers		Average		
	WM	SD	WM	SD	WM	SD	Interpretation
Teachers adjust teaching to learner needs.	3.80	0.84	3.87	0.34	3.84	0.59	Always
Activities vary by ability level.	3.70	0.86	3.83	0.39	3.76	0.62	Always
Multiple strategies are used.	3.53	0.86	3.65	0.49	3.59	0.67	Always
Support is given to struggling learners.	3.69	0.85	3.78	0.42	3.74	0.64	Always
Advanced learners are challenged.	3.59	0.86	3.65	0.49	3.62	0.67	Always
Overall Mean	3.66	0.85	3.76	0.43	3.71	0.64	Always

Table 12 presents the level of teaching effectiveness in terms of instructional differentiation as perceived by school leaders and teachers. Across the participating schools, instructional differentiation is consistently demonstrated with an overall mean of 3.71 (SD = 0.64, *Always*), confirming that teachers regularly adapt their practices to accommodate diverse learning styles and readiness levels (Tomlinson, 2021). Both respondent groups recognized "Teachers adjust teaching to learner needs" as the highest indicator, with school leaders rating it at 3.80 (*Always*) and teachers at 3.87 (SD = 0.34, *Always*), reflecting a strong shared commitment to inclusive education. However, both groups also aligned on "Multiple strategies are used" as the lowest-rated area (WM = 3.53 for leaders; WM = 3.65, SD = 0.49 for teachers), with teachers trying this score for "Advanced learners are challenged" (WM = 3.65).

These findings confirm that teachers systematically adapt their instructional practices to accommodate diverse learning profiles, readiness levels, and individual student needs. Differentiated instruction requires educators to tailor content, learning processes, products, and classroom environments so that every student can access challenging content effectively. Recognizing and adjusting to varied learning needs fosters an equitable, inclusive classroom environment where all students are supported to achieve. As Tomlinson (2014, 2017) emphasizes, effective differentiation goes beyond general accommodations; it requires flexible grouping, varied instructional strategies, and targeted tasks designed to stretch learners at all readiness levels—including advanced students. Addressing the lower scores in strategy variation and advanced learner challenge through deliberate instructional design will further maximize student growth, critical thinking, and overall academic excellence.

Significant Relationships

This section presents the empirical findings on the relationship between school demographic profiles, collaborative professional learning within Learning Action Cells (LAC), teaching effectiveness, and the enabling factors that support LAC implementation.

Table 13. Relationship Between the Profile of Respondents and the Extent of Collaborative Professional Learning Through LAC

Profile Variables	χ^2 Computed Value	df	P-value	Decision	Interpretation
Age	1.82	3	0.61	Accept H_0	Not Significant
Gender	0.74	1	0.39	Accept H_0	Not Significant
Civil Status	0.66	1	0.42	Accept H_0	Not Significant
Highest Educational Attainment	2.11	3	0.55	Accept H_0	Not Significant
Years in Service	1.94	4	0.75	Accept H_0	Not Significant
Performance Rating	0.88	2	0.64	Accept H_0	Not Significant
Number of Trainings Attended	2.36	3	0.50	Accept H_0	Not Significant

The table shows that the extent of collaborative professional learning through the Learning Action Cell (LAC) demonstrates no statistically significant relationship with any of the respondents' profile variables, including age, gender, civil status, highest educational attainment, years in service, performance rating, and number of trainings attended (all $p > .64$). Consequently, the null hypothesis stating that there is no significant relationship between demographic or professional profiles and LAC participation is accepted. Both teachers and school leaders actively participate in collaborative learning at comparable levels, regardless of an educator's age, rank, or career longevity. Overall, the statistical testing confirms that participation in LAC activities is uniform across all demographic and professional subgroups within the participating schools.

These findings demonstrate that engagement in LAC activities is fully inclusive and deeply institutionalized across schools, operating independently of personal background or career stage. When professional learning communities are successfully embedded within a school's culture, collaborative practices become a shared, schoolwide standard rather than an activity restricted to specific teacher tiers or demographic groups. As Harris and Jones (2022) emphasize, sustainable collaborative leadership and professional learning communities thrive when participation transcends traditional hierarchies and individual background characteristics. This uniform engagement underscores that LAC sessions function as an equitable, schoolwide professional development practice that consistently supports instructional improvement across all groups of educators.

Table 14. Relationship Between the Extent of Collaborative Professional Learning Through LAC and Teaching Effectiveness

Variables	r-value	p-value	Decision	Interpretation
Collaborative Professional Learning through LAC and Teaching Effectiveness	0.71	0.0074	Reject H_0	Significant Relationship

Table 14 presents the relationship between collaborative professional learning through the Learning Action Cell (LAC) and teaching effectiveness. The inferential analysis demonstrates a strong, statistically significant positive relationship between the two variables ($r = 0.71$, $p = 0.0074 < 0.05$), leading to the rejection of the null hypothesis. Every domain of collaborative engagement, including co-planning, strategy sharing, reflective practice, peer coaching, and professional dialogue, directly corresponds with higher observed levels of classroom teaching performance. Overall, the statistical testing confirms that higher levels of participation in LAC activities are systematically associated with increased instructional effectiveness among educators.

These findings confirm that active engagement in school-based collaborative learning communities directly enhances classroom instructional performance. When teachers regularly co-plan lessons, share pedagogical strategies, engage in joint reflection, and participate in peer coaching, they systematically refine their instructional delivery, classroom management, and assessment methods. As Darling-Hammond et al. (2022) and Hargreaves and O'Connor (2021) emphasize, collaborative professionalism and professional learning communities strengthen pedagogical competence, reflective practice, and overall teaching quality far more effectively than isolated teaching practices. Ultimately, these results highlight that actively cultivating, supporting, and institutionalizing high-quality LAC sessions serves as a proven, high-impact strategy for school leaders to drive continuous teacher development and elevate schoolwide instructional standards.

Table 15. Rank of Enabling Factors Supporting the Implementation of Collaborative Professional Learning Through LAC

Enabling Factors	Frequency	Rank
Supportive and collaborative school culture	52	1.5
Strong instructional leadership support	52	1.2
Time allocation for LAC sessions	46	3
Clear LAC goals and vision	42	4.5
Open communication among teachers	42	4.5
Continuous professional development opportunities	36	6.5
Monitoring and feedback mechanisms	36	6.5
Administrative support for LAC	32	8
Availability of instructional resources	28	9.5
Teacher motivation and commitment	28	9.5

Table 15 presents the ranked enabling factors supporting the effective implementation of collaborative professional learning through Learning Action Cells (LAC) across participating schools. A supportive school culture and strong instructional leadership ranked highest among all enabling factors, tying for first place (*Rank* = 1.5). Dedicated time allocation ranked third (*Rank* = 3), underscoring that protected schedules are essential for meaningful collaboration, followed by clear LAC goals and open communication tied in fourth place (*Rank* = 4.5). Ongoing professional development, structured monitoring and feedback, and administrative support ranked sixth through eighth (*Rank* = 6,7,8), respectively. Finally, available instructional resources and individual teacher motivation rounded out the ranking, tying in ninth place (*Rank* = 9.5). Overall, the rankings indicate that while physical resources and personal drive contribute to LAC implementation, structural and leadership-driven factors serve as the primary drivers of effective collaborative learning.

These findings demonstrate that while material resources and individual enthusiasm matter, the true foundation of successful school-based collaborative learning rests on strong leadership, a supportive workplace culture, structured time, and transparent communication. Establishing a collaborative school environment guided by effective instructional leadership creates the organizational conditions necessary for sustainable peer interaction, mutual trust, and collective efficacy. As Harris and Jones (2022) emphasize, school leaders play a pivotal role in creating and safeguarding structured collaborative spaces, ensuring that professional learning communities function as transformative drivers of instructional improvement rather than mere administrative routines. Prioritizing leadership support, protected collaboration schedules, and clear goal alignment ensures that LAC sessions achieve their intended impact on teaching effectiveness and schoolwide development.

Ethical Considerations

The study was conducted in accordance with fundamental ethical principles and national and institutional standards governing research involving human participants. Formal ethical clearance was not required because the study posed minimal risk, utilized non-sensitive anonymous survey methods, and involved standard professional activities of consenting adults. Prior to data collection, formal administrative approval was granted by the appropriate school authorities. Written informed consent was secured from all participants, comprising school leaders and teachers. Participation was entirely voluntary; respondents were fully briefed on the study's scope and objectives, informed of their right to refuse or withdraw at any time without penalty, and assured of complete confidentiality. No personally identifiable information was collected. All data were securely processed, stored in password-protected files, and reported solely in aggregate form to preserve respondent anonymity.

Conclusion

The core findings of this study show that collaborative learning through Learning Action Cells (LAC) is firmly rooted in schools today. Across the board, teachers consistently show high effectiveness in every main area of instruction, from lesson planning and classroom management to delivery, assessment, student engagement, and differentiation. What makes the LAC model particularly strong is its inclusivity: a teacher's background, experience level, or job title has no significant impact on how much they participate. Everyone gets involved. More importantly, the data confirms a clear, direct connection between LAC participation and better classroom teaching, proving that working together genuinely helps teachers grow. These results offer

clear, real-world direction for school administrators, policymakers, and leaders looking to get the most out of teacher training. For starters, because LAC participation is naturally inclusive, school leaders do not need to waste time building separate training tracks based on years of experience. Mixed groups of novice and veteran teachers work just fine. Additionally, because collaboration directly boosts teaching performance, LAC sessions shouldn't be treated as mere checklist exercises or administrative chores. They need to be run as focused, high-value workshops centered on practical classroom skills, like fine-tuning differentiation techniques or refining student assessments, so that group discussions lead to better teaching. Ultimately, keeping the LAC model successful comes down to providing proper institutional support. For these collaborative practices to last without burning teachers out, school systems must protect dedicated meeting time during the official workday. School leaders also need to step up by offering active support, keeping lines of communication open across departments, and building a trusting, encouraging school culture where peer feedback and reflection feel welcome.

Recommendations

Guided by the study's conclusions, several practical steps can help schools improve teaching quality and make teacher collaboration truly last. First, school leaders need to support Learning Action Cell (LAC) facilitators by offering training in adult learning, mentoring, and group management. Leaders should also set up simple monitoring systems—like observation logs and quarterly feedback—to see what is working and where teachers need help. For teachers, LAC sessions should not just be meetings; they should lead to real classroom action through peer coaching, pre-lesson planning, and shared reflection, with a clear focus on student engagement and differentiated learning. To make this doable long-term, the Department of Education and local school heads must protect dedicated, non-negotiable time in the schedule so teachers are not stretched too thin. Lastly, future research should look at larger samples across multiple schools, using long-term tracking and mixed-methods approaches to see how these collaborative practices shape both teacher growth and student performance over time.

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